

## SECTION 16112

### SURFACE METAL RACEWAY

#### PART 1 GENERAL

\*\*\*\*\*

##### **Edit 1.1 to match Project requirements.**

\*\*\*\*\*

#### 1.1 SECTION INCLUDES

- A. Surface metal raceway and fittings.
- B. Multioutlet assembly and fittings.
- C. Power & communications surface metal raceway and fittings.

#### 1.2 SUBMITTALS

- A. Submit the following according to the provisions of Section 01300:
  - 1. Catalog data for each type of surface metal raceway, including data proving that materials comply with specified requirements.

#### 1.3 QUALITY ASSURANCE

- A. Conform to requirements of ANSI/NFPA 70 - *National Electrical Code*.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purposes specified and shown.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to prevent damage.
- B. Protect products from corrosion and entrance of debris.

#### PART 2 PRODUCTS

\*\*\*\*\*

##### **Edit 2.1 through 2.6 to match Project requirements.**

\*\*\*\*\*

#### 2.1 SURFACE METAL RACEWAY

- A. Furnish surface metal raceway that conforms to the requirements of UL5 - *Surface Metal Electrical Raceways and Fittings*, and ANSI/NFPA 70, Article 352A.
- B. Furnish surface metal raceway fabricated from cold rolled galvanized steel with a thickness of not less than 0.040 inches and coated with a baked enamel finish.
- C. Furnish fittings required for a complete installation.
- D. Manufacturer: Wiremold "500" or "700" series

## 2.2 MULTI OUTLET ASSEMBLY

- A. Furnish multioutlet assembly that conforms to the requirements of UL5 - *Surface Metal Electrical Raceways and Fittings*, and ANSI/NFPA 70, Article 353.

\*\*\*\*\*  
**Select B, C, or D to match Project requirements. Standard stocked finish should be used in utilitarian spaces or where the raceway will be field painted. Grey should be used where it will match or accent architectural finishes. Stainless steel should be used only in laboratory spaces where there is the possibility of corrosion.**  
\*\*\*\*\*

- [B. Furnish multioutlet assembly surface metal raceway fabricated from cold rolled galvanized steel and coated with standard stocked baked enamel finish.]
- [C. Furnish multioutlet assembly surface metal raceway fabricated from cold rolled galvanized steel and coated with a grey baked enamel finish.]
- [D. Furnish multioutlet assembly surface metal raceway fabricated from Type 304 stainless steel.]
- E. Raceway shall be of a two piece design with a metal base and a snap on metal cover.
- F. Nominal dimensions of the assembled raceway shall be 1-1/4 inches wide by 3/4 inch high.
- G. Furnish fittings required for a complete installation.

\*\*\*\*\*  
**Use H. to match Project requirements for "standard" grounding receptacles.**  
\*\*\*\*\*

- H. Provide multioutlet assembly with pre-wired single NEMA 5-15R receptacles spaced 12 inches on center and wired alternately to 2 circuits with 3 No. 12 AWG THHN insulated conductors and a green THHN insulated No. 12 AWG ground wire.

\*\*\*\*\*  
**Use I. to match Project requirements for isolated ground power systems.**  
\*\*\*\*\*

- [I. Provide isolated ground multioutlet assembly with pre-wired single NEMA 5-15R isolated ground receptacles spaced 12 inches on center and connected to 1 circuit with 2 No. 12 AWG THHN insulated conductors and a green THHN insulated No. 12 AWG ground wire]
- J. Manufacturer: Wiremold "Plugmold 2000"

## 2.3 POWER AND COMMUNICATIONS SURFACE METAL RACEWAY

- A. Furnish power and communications surface metal raceway that conforms to the requirements of UL5 - *Surface Metal Electrical Raceways and Fittings*, and ANSI/NFPA 70, Article 352A.

\*\*\*\*\*  
**Select B, C, or D to match Project requirements. Grey is a standard stocked finish; it should be used in utilitarian spaces, where it will match or accent architectural finishes, or where the raceway will be field painted. Ivory should be used where it will match or accent architectural finishes. Stainless steel should be used only in laboratory spaces where there is the possibility of corrosion.**  
\*\*\*\*\*

- [B. Furnish power and communications surface metal raceway fabricated from cold rolled galvanized steel with a thickness of not less than 0.04 inches and coated with a grey baked enamel finish.]
- [C. Furnish power and communications surface metal raceway fabricated from cold rolled galvanized steel with a thickness of not less than 0.04 inches and coated with a polyester topcoat over an ivory colored base.]
- [D. Furnish power and communications surface metal raceway fabricated from Type 304 stainless steel with a thickness of not less than 0.04 inches.]
- E. Raceway shall be of a two piece design with a metal base and a snap on metal cover.
- F. Nominal dimensions of the assembled raceway shall be 4-3/4 inches wide by 1-3/4 inches high.
- G. Furnish fittings required for a complete installation to include a full-length partition separating the power wiring from the communications cables.

\*\*\*\*\*  
**Edit H. to match Project requirements.**  
 \*\*\*\*\*

- H. Provide plastic snap-in plate each 36 inches of the power and communications surface metal raceway. Each snap-in plate shall include one isolated ground duplex receptacle and one connector faceplate for two RJ11/RJ45 telecommunications connectors.
- I. Manufacturer: Wiremold "4000".

## 2.4 CONDUCTORS

Refer to Section 16120 -- Building Wire and Cable for power conductors to be installed in surface metal raceway.

\*\*\*\*\*  
**Delete 2.5 and 2.6 if power and communications surface metal raceway is not used.**  
 \*\*\*\*\*

## 2.5 WIRING DEVICES

Refer to Section 16140 -- Wiring Devices, for receptacles to be installed in power and communications surface metal raceway.

## 2.6 COMMUNICATIONS CABLES

Refer to Section 16740 -- Telecommunications Systems for telephone and data cables to be installed in power and communications surface metal raceway.

## PART 3 EXECUTION

### 3.1 EXAMINATION

Examine surfaces to receive surface metal raceway for compliance with installation tolerances and other conditions affecting performance of the raceway system. Do not proceed with installation until unsatisfactory conditions have been corrected.

### 3.2 GENERAL

- A. The Drawings show surface metal raceway terminations in approximate locations unless dimensioned. Verify termination locations of raceways before rough-in.
- B. The Drawings show routing of surface metal raceway in approximate locations unless dimensioned. Coordinate routing of raceways with structure, with interior finishes, and with work of other trades. Route raceways as required for a complete wiring system.
- C. Install surface metal raceway and fittings according to NFPA 70 and the manufacturer's instructions.
- D. Install surface metal raceway plumb, level, and tight to the mounting surface.

### 3.3 RACEWAY SUPPORTS

- A. Support surface metal raceway in accordance with the requirements of Section 16190, Electrical Supporting Devices and the manufacturer's instructions.
- B. Use flat head screws inside raceways.

### 3.4 GROUNDING

Ground and bond surface metal raceway according to Section 16450 -- Secondary Grounding and the manufacturer's instructions.

### 3.5 RACEWAY IDENTIFICATION

Mark and identify outlets in surface metal raceways as required in Section 16195 - Electrical Identification.

END OF SECTION